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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,989	02/27/2004	Daniel G. O'Neil	50037.229US01	6860
27488 7590 05/01/2007 MERCHANT & GOULD (MICROSOFT) P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER WASHBURN, DANIEL C	
			ART UNIT 2628	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/788,989	<b>Applicant(s)</b> O'NEIL ET AL.	
	<b>Examiner</b> Dan Washburn	<b>Art Unit</b> 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,6-9,14,16-18 and 25-31 is/are pending in the application.
- 4a) Of the above claim(s) 9,14,16-18 and 25-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments with respect to claims 1, 6-9, 14, 16-18, and 25-31 have been considered but are moot in view of the new ground(s) of rejection.

### *Election/Restrictions*

Applicant's election without traverse of group 1 subgroup A, drawn to a method of using a color scheme, wherein an incoming event notification is associated with an incoming call, in the reply filed on 2/28/07, is acknowledged.

### *Claim Objections*

Claim 1 is objected to because of the following informalities: The fourth and fifth lines of claim 1 read, "...wherein ***the software the software*** application associates a function with a soft key..." they should read, "...wherein ***the software*** application associates a function with a soft key..."

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 5,737,394) in view of Lee et al. (US 2002/0183098), and further in view of Lin (US 2004/0253976).

As to claim 1, Anderson describes a method for using a color scheme to communicate software application functionality associated with an incoming event notification and related to the integration of hardware and software in a computing device, comprising:

providing a software application on a computing device, wherein the software application associates a function with a soft key according to an incoming event notification, wherein the function of the soft key is selectable by receiving an input from a hardware button (column 5 lines 38-64 describes a telephone apparatus that includes a plurality of soft keys, further column 10 lines 33-53 describes that the function of the soft keys change based on incoming events, such as an incoming call or an incoming text message); and

receiving an incoming event notification that instantiates the software application on the computing device, wherein the software application determines software functionality options for the software key for responding to the incoming event notification (column 10 lines 33-53 describes the telephone apparatus receiving an incoming call or an incoming text message).

Anderson doesn't describe associating a color scheme with the software application to indicate that the function of the soft key is associated with the hardware button, nor does he describe illuminating the soft key and the hardware button on the computing device according to the color scheme to indicate that the hardware button is associated with the soft key functionality for responding to the incoming event notification.

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However, Lee describes associating a color scheme with a software application (paragraph 0005 describes prior art cellular phones that change the color of the LCD based on the identified calling party) and illuminating a soft key and a hardware button on a computing device according to the color scheme (paragraphs 0006-0009 and paragraph 0019 describe an improved cellular phone where the hardware buttons are illuminated in a specific color along with the LCD, in order to identify the calling party). It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Anderson the system and method of illuminating an LCD (which includes any displayed soft keys) and at least one hardware button according to a color scheme, as taught by Lee, in order to allow a user to determine the calling party by simply looking at the overall color appearance of the phone, rather than requiring a user to read the name displayed on the LCD. The advantage of the color based caller ID method described in Lee is that it allows a user to determine the calling party quickly and easily, which makes the phone more user friendly and thus more popular with the average consumer.

Anderson in view of Lee doesn't describe that the color scheme associated with the software application indicates that the function of the soft key is associated with a hardware button, nor does Anderson in view of Lee describe that the illuminated soft key and hardware button are illuminated according to the color scheme to indicate that the hardware button is associated with the soft key functionality for responding to the incoming event notification.

However, Lin describes a software application that detects the operating status of a telephone, determines all possibly enabled functions, and changes at least part of the

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light sources from a first status to a second status according to the operating status, in order to show at least one key corresponding to possibly enabled functions. Lin specifically describes that the software application uses a lighting scheme to indicate that the functions displayed on the LCD are associated with specific hardware buttons (paragraphs 0008-0010).

Lin further describes illuminating the hardware button on the computing device to indicate that the hardware button is associated with the currently displayed functionality presented on the LCD for responding to an incoming event notification (paragraphs 0022-0026 describe that when a mobile phone receives an incoming call a user is required to press 'send' or 'ok' in order to answer the call. The problem with this simple action is that the 'send' key and 'ok' key may not always be located in standard locations on the phone, thus a user may become confused, press the wrong key, and miss important calls. In order to remedy this problem, the invention described by Lin illuminates the 'send' key and the 'ok' key to indicate that these two hardware buttons will allow a user to answer the call. This method of illuminating the appropriate keys ensures that even a beginner will have an easy time operating the phone). It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Anderson in view of Lee the system and method wherein the software application uses a lighting scheme to indicate that the functions displayed on the LCD are associated with specific hardware buttons, and further wherein the software application illuminates a hardware button on the computing device to indicate that the hardware button is associated with the currently displayed functionality presented on the

LCD for responding to an incoming event notification, as taught by Lin, in order to light up the specific hardware buttons that should be used in conjunction with an incoming event notification, rather than simply lighting up random or all of the hardware buttons when the phone receives an incoming event notification. The advantage of lighting up the specific hardware buttons that are relevant to the incoming event notification is that it will help a user take appropriate action based on the incoming event notification, which makes the phone more user friendly and thus more popular with the average consumer.

Concerning claim 6, Lee and Lin both describe a method wherein illuminating the hardware button comprises illuminating an illuminating element, wherein the illuminating element is at least one member of a group comprising: a tri-colored light emitting diode and an electro-luminescence light (Lee paragraph 0018 and Lin paragraph 0021).

Regarding claim 7, Anderson describes a method wherein the incoming event notification is associated with an incoming call (column 10 lines 33-53 describes a user receiving a call while currently engaged in a conversation).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 5,737,394) in view of Lee et al. (US 2002/0183098), and further in view of Lin (US 2004/0253976), as applied to claim 1 above, and further in view of Kimura (US 6,762,740).

With regard to claim 8, Anderson in view of Lee and further in view of Lin doesn't describe a method wherein the color scheme changes to communicate information corresponding to elapsed time associated with the software application.

However, the background of Kimura describes JPA 10-145745, which discloses a portable telephone unit that varies the color of the backlight based on the current battery level (column 1 lines 39-67 and column 2 lines 1-9). The battery life of the portable phone is considered to be a measure of how long the phone has been on since it was last charged, and how much time remains before the phone must be recharged, thus varying the color of the backlight of the phone based on the battery life is considered a method wherein the color scheme changes to communicate information corresponding to elapsed time associated with the software application. It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Anderson, Lee, and Lin the system and method of varying the backlight of a portable phone according to an elapsed time associated with the software application, as taught by the background of Kimura, in order to allow a user to quickly and easily see how much battery life is left in the phone simply by observing the color of the backlight.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tsoi (US 5,425,077) describes a telephone with soft keys, Rowell, JR et al. (US 2005/0158915) describes a device interface with function keys and color coded soft key labels, Komiyama (US 6,690,955) describes a communication device for producing a color illumination uniquely identifying a calling source, Hama et al. (US 7,203,522) describes a method of displaying a green color scheme when the incoming telephone number is recognized and displaying a red color scheme when the incoming telephone number is not recognized, Hamamura et al. (US 2004/0072589)



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describes a cellular phone that allows a user to alter the color scheme used in the phone, and Hamada et al. (US 7,151,953) describes a communication apparatus having a light emitting unit that emits light in a variety of colors.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Washburn whose telephone number is (571) 272-5551. The examiner can normally be reached on Monday through Friday 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571) 272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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4/21/07



Uka Chauhan  
Supervisory Patent Examiner